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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,966	06/13/2006	Ville Kettunen	FRG-16076	6098
40854 7590 11/15/2010 RANKIN, HILL & CLARK LLP 38210 GLENN AVENUE WILLOUGHBY, OH 44094-7808				
EXAMINER SNYDER, ZACHARY J				
ART UNIT 2889		PAPER NUMBER		
NOTIFICATION DATE 11/15/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

40854@rankinhill.com  
spaw@rankinhill.com

### Office Action Summary

**Application No.**

10/533,966

**Applicant(s)**

KETTUNEN ET AL.

**Examiner**

Zachary Snyder

**Art Unit**

2889

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-22, 24-27, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-22, 24-27, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ ~~Notes of Informal Patent Application~~
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

Receipt is acknowledged of applicant's amendment filed 9/24/2010. Claims 20-22 and 24-27 and 29-30 are pending and an action on the merits is as follows.

***Response to Arguments***

Applicant's arguments filed 9/24/2010 have been fully considered but they are not persuasive.

Applicant argues that Jaskie does not disclose different patterns of grooves and that there is also no disclosure therein that the grooves themselves differ individually from one another in any way.

This argument is addressed in the new rejection of claim 1.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-22, 24-27, and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,698,941 to Jaskie et al.

In regard to claim 20, Jaskie discloses in figure 19 an optical element comprising

at least one at least partially transparent layer (layer 900)

a plurality of micro-optical structures arranged in said layer (grooves 920);

wherein the micro-optical structures are at least one of diffractive type micro-optical structures or refractive type micro-optical structures (light refracting groove 920, COL. 9, LINE 19), and

have characteristic profile dimensions of between 0.5 and 200 micrometers (the width of the light emitting regions is on the order of 150 micrometers, COL. 5, LINES 12-13, Grooves 920 are formed so that they overlap light-emitting regions 814, COL. 10, LINES 10-15)

wherein the micro-optical structures are arranged in at least two sections of said layer (shown in figure 19),

each section comprising a pattern of micro-optical structures defining an optical function and the patterns of micro-optical structures at least in adjacent sections are different from one another (shown in figure 19 that any two adjacent grooves are mirrored shapes of each other).

In regard to claim 21, Jaskie discloses the limitations of claim 20 and that the micro-optical structures of the micro-optical element are designed according to the position, size and shape of the one or more electroluminescent elements, and output light distribution of the one or more electroluminescent elements to be used in conjunction with the optical element (shown in figure 19 that light emitting elements 810, 808, and 814 are all taken into consideration regarding the placement of grooves 920, the light distribution of light 818 is adjusted by the micro-optical elements).

In regard to claim 22, Jaskie discloses the limitations of claim 20 and that the different sections comprise different micro-optical structures present in a single at least partially transparent layer (shown in figure 19 that the different micro-optical structures in section 904 are all provided in layer 900).

In regard to claim 24, Jaskie discloses the limitations of claim 20 and that independent section each have an individual optical function (shown in figure 19 that light 816 is affected differently by each groove 920).

In regard to claim 25, Jaskie discloses in figure 5 a method for manufacturing an optical element comprising the steps of:

providing an at least one at least partially transparent material with a surface (figure 19, layer 900),

arranging micro-optical structures in said layer, wherein the micro-optical structures are at least one of diffractive type micro-optical structures or refractive type micro-optical structures and have characteristic profile dimensions of between 0.5 and 200 micrometers (the width of the light emitting regions is on the order of 150 micrometers, COL. 5, LINES 12-13, Grooves 920 are formed so that they overlap light-emitting regions 814, COL. 10, LINES 10-15);

arranging the micro-optical structures in at least two sections of said layer, each section comprises a pattern of micro-optical structures defining an optical function and wherein the patterns of micro-optical structures at least in adjacent sections are different from one another (shown in figure 19 that any two adjacent grooves are mirrored shapes of each other).

In regard to claim 26, Jaskie discloses the limitations of claim 25 and that wherein the step of arranging the micro-optical structures in the at least one layer comprises embossing said micro-optical structures in each section of said layer (grooves 920 are formed by embossing, COL. 10, LINE 1).

In regard to claim 27, Jaskie discloses the limitations of claim 25 and that the method further comprises manufacturing the different sections by manufacturing different micro-optical structures in a single at least partially transparent layer (shown in figure 19 that the different micro-optical structures in section 904 are all provided in layer 900).

In regard to claim 29, Jaskie discloses the limitations of claim 20 and that the device further comprises a light emitting element arranged such, with respect to the at least one at least partially transparent layer, that light emitting by the light emitting element is incident on at least two sections comprising micro-optical structures that different from another (shown in figure 19).

In regard to claim 30, Jaskie discloses the limitations of claim 20 and that the micro-optical structures form a pattern that, as projected onto a plane of the micro-optical element, has line symmetry along two perpendicular lines (shown in figure 19).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary Snyder whose telephone number is (571)270-5291. The examiner can normally be reached on Monday through Thursday, 7:30AM to 6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Toan Ton can be reached on (571)272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Toan Ton/  
Supervisory Patent Examiner, Art Unit 2889

/Zachary Snyder/  
Examiner, Art Unit 2889